# **APPPROVED JURISDICTIONAL DETERMINATION FORM** U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

## SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 18 JUN 2020; 15 MAY 2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, 212-198 Crescent Road Property JD Request, LRN-2020-00027

	1. 2020 00027
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: «Project_Location»  State: Tennessee County/parish/borough: Rutherford City: Murfreesboro  Center coordinates of site (lat/long in degree decimal format): Latitude 35.743946 and Longitude -86.413851  Universal Transverse Mercator:  Name of nearest waterbody: «waterway» Lytle Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: West Fork Stones River  Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  Office (Desk) Determination. Date: 11 MAY 2020  Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) the review area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. equired]
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):   TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters <sup>2</sup> (RPWs) that flow directly or indirectly into TNWs  Non-RPWs that flow directly or indirectly into TNWs  Wetlands directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs  Impoundments of jurisdictional waters  Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:  Non-wetland waters: linear feet: width (ft) and/or  Wetlands: acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Two potential non-jurisdictional depressional features were identified in the request

for jurisdictional determination report submitted by Civil & Environmental Consultants, Inc. (CEC), for the property located at 212 and 198 Crescent Road in Murfreesboro, Rutherford County, Tennessee. The featured

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>&</sup>lt;sup>3</sup> Supporting documentation is presented in Section III.F.

identified as "WTL-1" is a geographically isolated, emergent wetland that is approximately 0.013 acres in area. This wetland is located at Latitude 35.744132; Longitude -86.413052 in a linear depression that is underlain by shallow bedrock with no topographic surface inlet or outlet channels. The nearest defined channel, Lytle Creek, is located approximately 1,870 feet to the west. The wetland is isolated from this watercourse by upland pastured land. The West Fork of Stones River is the nearest traditionally navigable water within the wetland's HUC 12, and is located approximately 4,615 feet north of the wetland with no known surface or subsurface flow path. Wetland-1 does not have a connection to the 100 year floodplain.

Hydrologic indicators for this wetland include standing water, saturation, sediment deposits, and geomorphic position. Dominant vegetation includes *Ranunculus abortivus* (*FACW*) and *Juncus tenuis* (*FAC*). According to the Munsell TM soil color chart, soils observed in WTL-1 had a matrix of 10YR 4/2 with 5 % redox concentrations along pore linings with a matrix of 7.5YR 4/6, which meets the F3 Depleted Matrix Hydric Soil Indicator. Wetland-1 does not provide nutrient cycling, sediment retention, organic carbon transport for the nearest tributary. It is not a seed source for plants, a food source or a wildlife corridor for fauna in the nearest tributary. It neither contributes to biomass export nor has faunal similarity with the nearest tributary.

The feature identified as WET-1 does not appear on the National Wetlands Inventory (NWI) Maps, USGS Topographic Map, nor does the feature appear to be located on hydric soils according NRCS Rutherford County, Tennessee Soil Survey. The data does not indicate a surface connection or shallow groundwater connection to waters of the U.S, and is geographically isolated. Wetland-1 does not support a link to interstate or foreign commerce. Wetland-1 is not known to be used by interstate or foreign travelers for recreation or other purposes; does not produce fish or shellfish that could be taken and sold in interstate or foreign commerce; and is not known to be used for industrial purposes in interstate commerce. Wetland-1 was determined to be non-jurisdictional under the CWA because it is isolated and lacks a link to interstate commerce sufficient to serve as a basis for jurisdiction.

The featured identified as Pond-1 is an approximately 0.04 acre depressional area located Latitude 35.748027, and Longitude -86.413501. This feature exhibits no inlet or outlet around this feature, and this feature does not have a surface or shallow subsurface connection to any other on-site waters. The feature labeled as Pond-1 appears to be farm pond excavated in uplands that may remain inundated during the early part growing season, but dries completely during the dry season. During the consultants delineation site visit conducted on 26-NOV-2019, the depressional feature did not contain surface water. According to the NRCS Soil Survey for this property, Pond-1 is located on Lomond Silt Loam, which is classified as dry land soils. Pond-1 is located approximately 2934 feet from the nearest traditional navigable water West Fork of Stones River. Pond-1 is not within the 100 year floodplain according the FEMA Floodplain panel consulted for this review. Pond-1 appears to be a farm pond excavated in uplands. The preamble for 33 CFR 328, published in Federal Register Volume 51, Number 219, published November 13, 1986 (page 41217), states "For clarification, it should be noted that we generally do not consider the following waters to be "Waters of the United States.... (c) artificial lakes and ponds created by the excavation and/or diking of dry land to collect and retain water which are used exclusively for such purposes as stock watering, irrigation, settling basins or rice growing." Based on the information above, Pond -1 is not a justidictional water of U.S.

Based on a review of information submitted by Civil & Environmental Consultants, Inc. on 11-DEC-2019, including: aerial photography dated 02-DEC-2019, USGS Fosterville, TN Quadrangle Map, NRCS Soil Maps for Rutherford County, Tennessee, a review of the National Hydrologic Dataset, U.S. Fish and Wildlife National Wetland Inventory database, and photographs of the project site, I have determined the features identified "WTL-1" and "Pond-1" are not waters of the U.S. and are not jurisdictional under Section 404 of the Clean Water Act as defined by 33 CFR Part 328.3(a).

### **SECTION III: CWA ANALYSIS**

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

#### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i)	Wat Drai Ave	teral Area Conditions: ershed size: Pick List inage area: Pick List rage annual rainfall: inches rage annual snowfall: inches
(ii)		Relationship with TNW:  Tributary flows directly into TNW.  Tributary flows through Pick List tributaries before entering TNW.  Project waters are Pick List river miles from TNW.  Project waters are Pick List river miles from RPW.  Project waters are Pick List aerial (straight) miles from TNW.  Project waters are Pick List aerial (straight) miles from RPW.  Project waters cross or serve as state boundaries. Explain:  Identify flow route to TNW <sup>5</sup> :  Tributary stream order, if known:
	(b)	General Tributary Characteristics (check all that apply):  Tributary is:  Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
		Tributary properties with respect to top of bank (estimate):  Average width: feet  Average depth: feet  Average side slopes: Pick List.
		Primary tributary substrate composition (check all that apply):  Silts Sands Concrete  Gravel Muck  Bedrock Vegetation. Type/% cover:  Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: <b>Pick List</b>

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary gradient (approximate average slope):	%		
	(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review are Describe flow regime: Other information on duration and volume:	:a/ye	ar: Pick List	
		Surface flow is: Pick List. Characteristics: .			
		Subsurface flow: <b>Pick List</b> . Explain findings:			
		Tributary has (check all that apply):			
		□ Bed and banks □ OHWM <sup>6</sup> (check all indicators that apply): □ clear, natural line impressed on the bank □ changes in the character of soil □ shelving □ vegetation matted down, bent, or absent □ leaf litter disturbed or washed away □ sediment deposition □ water staining □ other (list): □ Discontinuous OHWM. <sup>7</sup> Explain:		the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting scour multiple observed or predicted flow events abrupt change in plant community	
If fa	ctors	other than the OHWM were used to determine lateral  High Tide Line indicated by:  oil or scum line along shore objects  fine shell or debris deposits (foreshore)  physical markings/characteristics  tidal gauges  other (list):	Me	nt of CWA jurisdiction (check all that apply): an High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.	
(iii)	(iii) Chemical Characteristics:				
	Cha	racterize tributary (e.g., water color is clear, discolored characteristics, etc.). Explain:	, oil	y film; water quality; general watershed	
	Ider	ntify specific pollutants, if known:			
(iv)	Biol	Riparian corridor. Characteristics (type, average widt Wetland fringe. Characteristics:  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain Aquatic/wildlife diversity. Explain findings:	h):		
Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW					
(i)	(a)	rsical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Ex	крlai	n: .	
		Flow is: Pick List. Explain:			

2.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

			Surface flow is: Pick List Characteristics:			
			Subsurface flow: Pick Lis  Dye (or other) test			
		(c)	Wetland Adjacency Deter Directly abutting Not directly abutting Discrete wetland becomes Separated by bern	nydrologic connection. Etion. Explain:		
		(d)	Proximity (Relationship) to Project wetlands are <b>Pick</b> Project waters are <b>Pick</b> L Flow is from: <b>Pick List</b> .	<b>List</b> river miles from TN ist aerial (straight) miles	from TNW.	
	(;;)	Cha	Estimate approximate local characteristics:	ition of wetland as within	the Pick List floodplain.	
	(11)	Cha		etc.). Explain: .	orown, oil film on surface; water qu	ality; general
		iuci	itily specific polititants, if k	nown		
	(iii)		logical Characteristics. W Riparian buffer. Characte Vegetation type/percent of Habitat for: Federally Listed specie Fish/spawn areas. Exp Other environmentally Aquatic/wildlife divers	ristics (type, average wid over. Explain: es. Explain findings: lain findings: -sensitive species. Expla	lth):	
3.	Cha	ract	eristics of all wetlands adj	acent to the tributary (	if any)	
		All	wetland(s) being considered	d in the cumulative analy	sis: Pick List	
		App	proximately ( ) acres	in total are being conside	ered in the cumulative analysis.	
	For	each	wetland, specify the follow	ving:		
			Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
			Summarize overall biolog	ical, chemical and physic	al functions being performed:	

### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

• Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?

- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions
  for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	<ul> <li>RPWs that flow directly or indirectly into TNWs.</li> <li>□ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:</li> <li>□ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:</li> </ul>
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

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<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

			Wetlands that do not directly abut an RPW, but when considered in combare adjacent and with similarly situated adjacent wetlands, have a signific Data supporting this conclusion is provided at Section III.C.	
		Pro	vide acreage estimates for jurisdictional wetlands in the review area:	acres.
	6.		tlands adjacent to non-RPWs that flow directly or indirectly into TNV Wetlands adjacent to such waters, and have when considered in combina adjacent and with similarly situated adjacent wetlands, have a significant Data supporting this conclusion is provided at Section III.C.	tion with the tributary to which they are
		Pro	vide estimates for jurisdictional wetlands in the review area: acres.	
	7.	Imp As a	poundments of jurisdictional waters. 9 a general rule, the impoundment of a jurisdictional tributary remains jurisd Demonstrate that impoundment was created from "waters of the U.S.," of Demonstrate that water meets the criteria for one of the categories preserd Demonstrate that water is isolated with a nexus to commerce (see E below).	r ated above (1-6), or
E.	DEC INC	GRA whice from whice Inter Othe	TED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING IS DATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE OF CHECK ALL THAT APPLY): 10 Is the are or could be used by interstate or foreign travelers for recreational or a which fish or shellfish are or could be taken and sold in interstate or foreign are or could be used for industrial purposes by industries in interstate constate isolated waters. Explain:  It is a support to the country of the country	other purposes.
		Tribi Othe Id	estimates for jurisdictional waters in the review area (check all that apply) utary waters: linear feet width (ft). er non-wetland waters: acres. dentify type(s) of waters: lands: acres.	:
Qua Fisl feat	Sultandran	If portion English Rev Wate Other States I Williams I W	DRISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK A otential wetlands were assessed within the review area, these areas did not gineers Wetland Delineation Manual and/or appropriate Regional Supplem iew area included isolated waters with no substantial nexus to interstate (or Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review solely on the "Migratory Bird Rule" (MBR). Iters do not meet the "Significant Nexus" standard, where such a finding is er: (explain, if not covered above): Based on a review of information sure. On 11-DEC-2019, including: aerial photography dated 02-DEC-Map, NRCS Soil Maps for Rutherford County, Tennessee, a review of dlife National Wetland Inventory database, and photographs of the putified "WTL-1" and "Pond-1" are not waters of the U.S. and are not judical as defined by 33 CFR Part 328.3(a). See rationale in Section II.	meet the criteria in the 1987 Corps of ents. or foreign) commerce. area would have been regulated based required for jurisdiction. Explain: abmitted by Civil & Environmental 2019, USGS Fosterville, TN of the National Hydrologic Dataset, U.S. roject site, I have determined the urisdictional under Section 404 of the
	Pro MB	vide a R fac prof Nor Lak Oth	acreage estimates for non-jurisdictional waters in the review area, where the ctors (i.e., presence of migratory birds, presence of endangered species, use fessional judgment (check all that apply):  n-wetland waters (i.e., rivers, streams): linear feet width (ft).  tes/ponds: 0.04 acres.  er non-wetland waters: acres. List type of aquatic resource: .tlands: 0.013 acres.	ne sole potential basis of jurisdiction is the

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, nere such a finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource: .  Wetlands: acres.
SECTI	ON IV: DATA SOURCES.
	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and,
	here checked and requested, appropriately reference sources below):
	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
$\boxtimes$	· <u> </u>
	Office concurs with data sheets/delineation report.
_	☐ Office does not concur with data sheets/delineation report.  Data sheets prepared by the Corps: .
	Corps navigable waters' study:
-	U.S. Geological Survey Hydrologic Atlas:
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
$\boxtimes$	
$\boxtimes$	
	therford County, Tennessee.
	State/Local wetland inventory map(s):
	FEMA/FIRM maps: .
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
$\overline{\boxtimes}$	
_	or ☑ Other (Name & Date):BDY Site Photos 02-DEC-2019.
	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law:
	Applicable/supporting scientific literature:
	Other information (please specify):

## B. ADDITIONAL COMMENTS TO SUPPORT JD: .